ADB

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Georgia: Strengthening Domestic Resource Mobilization

Final Report

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Asian Development Bank

CURRENCY EQUIVALENTS
(as of April 2015)

Currency Unit	–	Lari (GEL)
GEL1.00	=	0.43 $
$1.00	=	2.32 GEL

ABBREVIATIONS

ADB	–	Asian Development Bank
ATM	–	Average Time to Maturity
BD	–	Budget Department
CDs	-	Certificates of Deposits
DeM	–	Debt Management
DMFAS	–	Debt Management and Financial Analysis System
DeMPA	–	Debt Management Performance Assessment
DRM	–	Domestic Resource Mobilization
DSA	–	Debt Sustainability Analysis
eDMS	–	Electronic Debt Management System
eTreasury	–	Electronic Treasury System
FFD	–	Fiscal Forecasting Department
FMD	–	Financial Markets Department
GEL	–	Georgian Lari
GDP	–	Gross Domestic Product
GoG	–	Government of Georgia
IFI	–	International Financial Institutions
IMF	–	International Monetary Fund
MOF	–	Ministry of Finance
MOESD	–	Ministry of Economy and Sustainable Development
MOF	–	Ministry of Finance
MTDS	–	Medium Term Debt Strategy
NBG	–	National Bank of Georgia
PDEFD	–	Public Debt and External Financing Department
PDD	–	Public Debt Division
STA	-	Single Treasury Account
TA	–	Technical Assistance
TOR	–	Terms of Reference
T-bills	–	Treasury Bills
T-bonds	–	Treasury Bonds

NOTE

In this report, $ refers to US Dollars

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I. INTRODUCTION

1. This report contributes to the Asian Development Bank's (ADB) Technical Assistance program on Strengthening Domestic Resource Mobilization in Georgia (GEO), TA 8716, to achieve more inclusive growth in Georgia, during 2014-2016. The Debt Management Specialist activities were conducted during February 9th to April 30th 2015.

2. In cooperation with the Ministry of Finance's Public Debt and External Financing Department, the Debt Management Specialist consulted with relevant stakeholders in relation to developing a medium-term debt management strategy (MTDS) and looking into institutional arrangements, debt monitoring and forecasting practices, analytical capacity in external and domestic borrowing, preliminary fiscal transparency evaluation, and improve communication with domestic stakeholders.

3. The key interface agencies and institutions for the Debt Management Specialist were:

   - Public Debt and External Financing Department (PDEFD);
   - The Public Debt Division (PDD);
   - The Budget Department (BD);
   - The Fiscal Forecasting Department (FFD); and
   - The National Bank of Georgia (NBG).

   A full list of meetings is contained in section 5 of this report.

4. This report provides recommendations and actions for developing a medium-term debt management strategy and suggested system requirements for debt management and analysis.

5. It should be noted that due to scheduling constraints with the Public Debt and External Finance Department, the Debt Management Consultant was unable to conduct the intended workshop. However, the workshop's materials are attached as an appendix to this final report.

II. EXECUTIVE SUMMARY

6. The Debt Management Specialist's initial focus was an assessment of the public debt management legal environment, institutional coordination and arrangements, public debt management initiatives and capacity, public debt portfolio composition, and macroeconomic condition in Georgia. This report provides a general overview of these fore mentioned components.

7. A key component to this Technical Assistance program in Georgia is the Ministry of Finance's Public Debt and External Finance Department's efforts in developing a medium-term debt management strategy (MTDS). This document provides an overview of a medium-term debt management strategy's concepts, potential benefits, core principles and enabling framework, and macroeconomic coordination. Also, included is a narrative on risk indicators and targets, trends in debt management, debt and capital market development as a MTDS objective, and data base system suggestions for debt management analytics.

8. Georgia's public debt to GDP stood at 35.5% as of 2014 and the composition of foreign currency and domestic currency debt to total public debt was 75% to 25% respectfully. Georgia's external public borrowing is primarily on concessional terms from multilateral and bi-lateral sources for addressing infrastructure and other development needs

9. A medium-term debt management strategy is a plan that the government intends to implement over the medium-term (three to five years) in order to achieve a composition of the government debt portfolio that captures the government's preferences with regard to the cost-risk tradeoff. Potential risk and or cost can arise from uncertainty of the government's financing strategy.

10. The MTDS operationalizes the government's debt management objectives to :(i) Ensure the government's financing needs and payment obligations are met in full; (ii) Cost and risk preferences; (iii) Achieving a desired debt portfolio composition e.g. cost and risk taking into account constraints; and (iv) Development of the domestic government securities market.

Key Recommendations:

11. Key recommendations are summarized below and more detailed suggestions are within the content of each appropriate section of this report. Also, a summary of recommendations is provided in the appendix section of this paper.

12. MTDS Core Principles / Enabling Framework:
    - Legal Framework;
    - Institutional Arrangement;
    - Sound debt management systems.

13. MTDS Macroeconomic Coordination:
    - Fiscal Policy;
    - Debt Sustainability & Fiscal Planning;
    - Monetary Policy;
    - Exchange Rate Policy;
    - Domestic Debt Markets.

14. Recommended actions and steps in developing and designing a medium-term debt management strategy, MTDS dissemination, MTDS implementation and monitoring, and suggested document structure. Also, the actions and steps are presented in a sequencing action plan in the appendix section of this paper.

15. MTDS Risk Indicators and Targets. Developing a coherent debt management strategy requires well-defined cost and risk elements. It is important that debt managers are clear about what exactly is captured by specific cost and risk measures so that the most appropriate measures are selected for a given objective. The recommended risk measures are discussed in the paper.

16. Debt and capital Market development as a MTDS objective is recommended in this paper. To facilitate the implementation of a debt management strategy, commonly an explicit goal of debt management is to promote the development of the domestic government securities market by creating enabling conditions for developing money markets, primary markets, secondary markets, the investor base, custody and settlement systems, and debt market regulation.

17. Lastly, recommended for debt system analytical capacity are suggested cost and risk indicators for debt inputs and analysis. A robust debt recording system should provide for an accurate, consistent, and comprehensive database of domestic and external debt. Also, suggested actions are demonstrated in the appendix section of this paper.

III. BACKGROUND

A. Country Background

18. Economic growth of Georgia has averaged 5.8% annually during 2004 to 2014, with per capita gross national income increasing from $1,888 to $3,835 in the same period. Foreign direct investment flows as a percentage of nominal GDP averaged 9.4%. Considerable improvements in the ease of doing business in Georgia have been a contributing factor to economic development and investment flows.

19. Georgia's principal economic sectors are trade, manufacturing, transport, and communication, agriculture, public administration, construction, healthcare, and education (figure 1).

Figure 1: Georgia's Principle Economic Sectors

Source: Geostat

20. The fiscal position of the GOG pre 2008 global financial crisis averaged a fiscal deficit of roughly 3.2% to nominal GDP. However, the crisis impacted capital inflows and economic growth resulting in fiscal interventions from the GOG to stem economic deterioration thus returning the economy to healthy growth and a more stable fiscal position (figure 2).

Figure 2: GOG's Fiscal Position

Source: MOF

21. The current, 2015, challenging regional environment has caused currency volatility putting pressure on the Georgian currency. As roughly 75% of the government's stock of debt is denominated in foreign currency, while at low concessional interest rates, it highlights the potential exchange rate risks facing the government to service external debt.

Figure 3: Georgian Currency to US$

Source: NBG

22. Georgia's international reserves held at the National Bank of Georgia (NBG) stood at $2.61bln as of January 2015.

23. Georgia is classified as a lower middle-income country and has achieved 'blend' status, which enables the country to source concessional financing and at the same time deemed credit-worthy to access market based finance. However, concessional financing from multi-lateral institutions has been declining and the concessional borrowing window is expected to close out by January 2017.

24. As a sovereign issuer, Georgia has been rated by S&P, Fitch, and Moody's:
    - *Standard & Poor's: BB- Stable (affirmed November 2014);*
    - *Fitch Ratings: BB- Stable (affirmed May 2015);*
    - *Moody's: Ba3 Positive (outlook revised positive August 2014).*

B. Public Debt Evolution

25. Georgia accumulated significant stocks of external debt post independence to fund energy imports where by external debt to GDP exceeded 80% in the mid 1990s. When the country realized strong economic growth of roughly 10% annually on average during the 1996 to 1998 period, external debt to GDP declined below 58%. However, the Russian Ruble crisis of 1998 reversed the declining debt to GDP trend. The declining trend resumed in the early 2000s with a brief up tick resulting from the 2008 global financial crisis (see figure 4).

26. Georgia's public debt to GDP stood at 35.5% as of 2014 and the composition foreign currency and domestic currency debt to total public debt was 75% to 25% respectfully. (figures 5 & 6). Georgia's external public borrowing is primarily on concessional terms from multilateral and bi-lateral sources for addressing infrastructure and other development needs. The external debt portfolio consists of 74% fixed rate and 26% variable rate. The weighted average interest rate on external debt is 1.9% and 7.8% for domestic debt. The contractual maturity of external debt is 23 years and the average time to maturity (ATM) for domestic debt is 2.3 years.

Figure 4: Total Public Debt to Nominal GDP

Source: MOF

Figure 5: External & Domestic Public Debt Composition

Source: MOF

Figure 6: External Debt Currency Decomposition

Source: MOF

27. Georgia has successfully tapped the international capital markets in 2008 with its debut issuance of a 5-year Eurobond and subsequently in 2011 with its second external placement of a 10-year Eurobond.

28. The Ministry of Finance (MOF) issues GEL denominated Treasury bills (T-bills) with maturities of 12-months and Treasury bonds (T-bonds) with tenors of 2, 5, and 10-years

(figure 7). The holders of treasury securities are predominately the domestic commercial banks. Total stock of domestic government debt was GEL 1.28 billion as of October 2014.

Figure 7: Domestic Public Debt Composition

Source: MOF

29. The National Bank of Georgia issues Certificates of Deposits (CDs) in maturities of 3-months and 6-months on a weekly basis for the purpose of liquidity management. The CDs outstanding composition stands at 47% for 3-months and 53% for 6-months, as of January 2015.

30. The increasing stock of treasury bills and central bank CDs, since 2009, has provided the National Bank of Georgia with a greater amount of liquidity management tools (figure 8). The National Bank of Georgia's policy mandate to create price stability, contain volatility, and control inflation has benefited from T-bills and CDs as additional monetary policy tools, (figure 9).

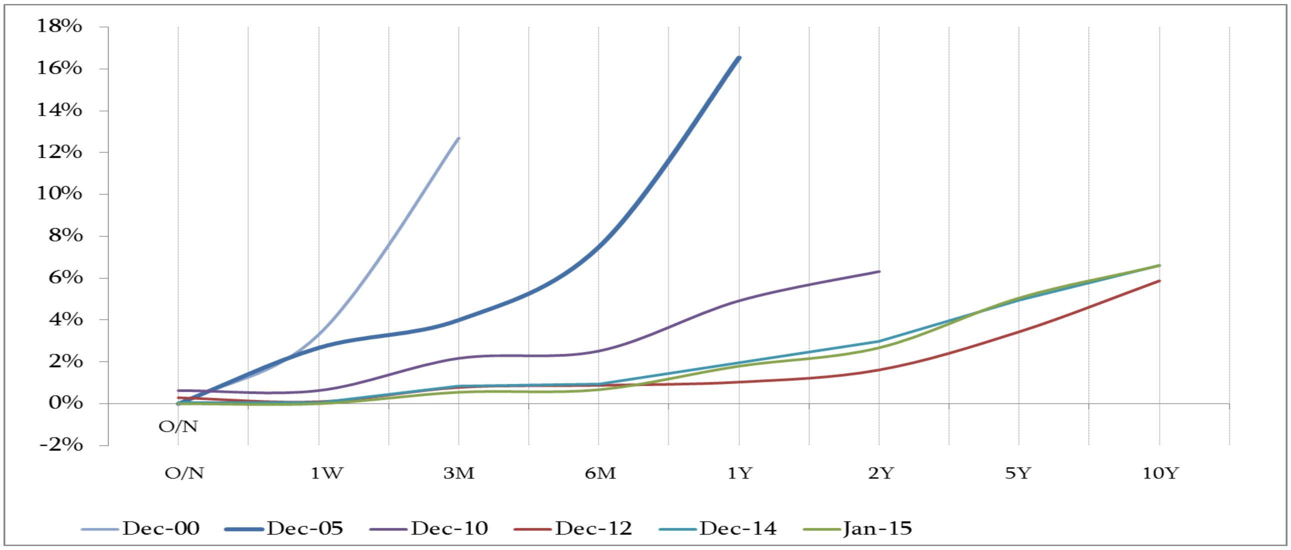
Figure 8: Stock of Government T-bills & NBG T- CDs

Source: NBG

Figure 9: Core Inflation
Source: Geostat, NBG

31. Yield spreads to the policy rate e.g. risk premium, has reduced significantly from over 16% in 2005 to roughly 6% in 2015 (figure 10) The benefits of this to public debt management to be discussed. This reduction of the risk premium provides the Ministry of Finance with more efficiency in issuing medium to long-term debt.

Figure 10: Yield Spreads to the NBG Policy Rate



Source: NBG

C. Public Debt Law

32. The legal framework clearly authorizes the Ministry of Finance to be the sole agency with the responsibility of procuring financing through loan negotiations with international financial institutions, foreign governments, and the issuance of domestic currency government securities on behalf of the Government of Georgia.

33. The debt law does articulate public debt management objectives to be:

- Ensure that the funding needs of the Government are met;
- Minimize the cost of public debt in the medium-term while keeping risks in the public debt portfolio at prudent levels;
- Promote the development of the domestic market for government securities.

34. The debt law does state a requirement for a debt management strategy (in discussion phase), to include:

- Describe the historical trend and current structure of the Government debt and on-lending, with an assessment of the corresponding risks;
- Evaluate financial market constraints and the macroeconomic policies of the Government that can influence the choice of strategy;
- Take into account the most recent Debt Sustainability Analysis and its implications for debt management and strategy design;
- Include a quantification and analysis of the cost-risk trade-offs of different debt strategies under different economic and financial conditions;
- Set out the desired direction of borrowing; in the medium-term the government may design more precise strategic targets and include the analysis underlying such targets;
- Contain an annual financing plan, which will be designed in accordance with the MTDS.

35. The debt law requires the establishment of a Debt Management Advisory Committee to advise the Minister/ Government of Georgia on all matters relating to the policy and strategy of public debt management, on-lending, and guarantees.

36. The Budget Law establishes the debt ceiling in terms of flow and stock at the end of the year, both for external and domestic debt and also sets the ceiling for guarantees. The maximum annual fiscal deficit is stipulated not to exceed 3% of GDP.

37. The approval and issuance of central government loan guarantees are set out in the State Debt Law of Georgia. The law provides the MOF with authority to issue government guarantees (though to be agreed by the NBG) and keep records of the guarantees. The MOF has not issued sovereign guarantees since 1998. The MOF provides on-lending sources to mainly SOEs and municipalities. The PDEFD is responsible for on-lending of external funds.

D. Public Debt Institutional Arrangements

38. The MOF's Public Debt and External Financing Department is a dedicated debt department performing front and back office activities relating to external and domestic debt management. The front and back staffs are conducting some middle office functions. However, dedicated staff are in the process of defining the roles and responsibilities for the middle office. The PDEFD, under the authority of the Deputy Minister, has two main divisions each led by a Deputy Head of Department and a Division Head, namely: i) the Public Debt Division (PDD) and ii) the International Investment Projects Division.

39. Current debt management activities carried out within Public Debt Division are as follows:

- ***Front Office activities include:***

  (i) Participating in the preparation of the domestic government debt issuance calendar;
  (ii) The issuance of sovereign bonds in the international capital markets;
  (iii) Negotiating donor financing;
  (iv) Analyzing multilateral loan terms and conditions.

- ***Middle Office activities shared by the front and back office:***

  (i) Providing analytical inputs for planning the annual gross funding requirement;
  (ii) Conducts debt sustainability analysis (DSA);
  (iii) Domestic and external debt monitoring and forecasting.

- ***Back Office activities Include*:**

  (i) Debt registration and accounting of external and domestic debt, on-lending, and guarantees;
  (ii) Initiates debt servicing;
  (iii) Analyzing multilateral loan terms and conditions;
  (iv) Monitors compliance requirements in on-lending and guarantee agreements.

40. The international investment projects division focus is on front office activities related to funding for investment projects, including preparing and participating in multi- and bilateral negotiations with donors and IFIs extending loans or grants, as part of a team including other government and central bank representatives. The staff monitors the projects' implementation and progress so as to track their financial implications e.g. disbursements.

41. Cash Management functions are within the Treasury Department under the Budget Department and the authority of the Deputy Minister. The cash management function is separate from the debt management function. MoF has implemented a Single Treasury Account (STA) and cash flow forecasts are produced on a monthly basis for the full year.

42. In terms of fiscal coordination for the annual budget preparation and revisions, the PDEFD submits to the Budget Department debt service projections and the expected aggregate stock of government debt. The forecasts are prepared by the Public Debt Division and approved by the head of the department prior to being sent to the Budget Department.

43. Macroeconomic forecasts and outcomes are regularly produced by the Fiscal Forecasting Department (FFD) and presented to stakeholders within the MoF, including the PDEFD. The PDEFD staff annually prepares a Debt Sustainability Analysis (DSA) in collaboration with the FFD.

44. The PDEFD carries out formal communications with domestic stakeholders and market participants on a roughly semi-annual basis which includes the local commercial banks who are the predominate purchasers of domestic government debt. The NBG carries out more frequent dialogue with market participants, as typically the monetary authority is closer to market players through central bank operations. These two sets of dialogue and the information derived are shared between the MOF and the NBG on domestic government securities issuance planning.

45. The NBG's Financial Markets Department (FMD) acts as the MOF's fiscal agent to conduct primary market auctions of government securities. Auctions are conducted on a non-competitive and competitive multiple priced basis. As the fiscal agent the FMD closely coordinates with the MOF on the government's domestic borrowing program. The Payment Service Department handles the back office functions, which includes debt servicing as instructed by the MOF.

46. The NBG participates in the government's negotiation team for multi and bilateral debt, which includes the Ministries of Finance, Economy, Justice, Foreign Affairs and the relevant line ministry; all of these institutions must formally document their agreement with the terms obtained in the negotiation.

47. The PDEFD's front office and middle office staffs are responsible for drafting and implementing the medium-term debt management strategy. The current draft MTDS essentially sets forth debt management concepts and their debt objectives e.g. (i) meeting the government's funding requirements and payment obligations on a timely manner, (ii) minimize cost over time, (iii) at a level of prudent risk, and (iv) government securities market development.

48. A Debt Management Advisory Committee is to be established which would comprise officials and staff of the MOF and NBG. The committee's outputs are as follows:

    a. Advise the Minister on –
        (i) Medium Term Debt Management Strategy;
        (ii) Annual Financing Plan;
        (iii) Guarantees and on-lending;
        (iv) Restrictions on the amount of borrowing and guarantees; and

b. Assess the policies, strategies and operations of direct debt, on-lending, and guarantees for debt with a view to ensuring consistency with the Debt Law and the macroeconomic, monetary, and fiscal policies of Government;

c. Monitor the implementation of the MTDS.

49. Establishing a debt management committee is a recommended action as it centralizes and formalizes coordination of the MOF and NBG on debt management policies and strategies.

50. Public debt division annually carries out debt sustainability analysis (DSA) using macroeconomic and fiscal indicators of GDP growth rate, interest rates, exchange rates, and the government's budget primary balance.

IV. MEDIUM TERM DEBT MANAGEMENT STRATEGY (MTDS)

51. A MTDS is a plan that the government intends to implement over the medium-term (three to five years) in order to achieve a composition of the government debt portfolio that captures the government's preferences with regard to the cost-risk tradeoff. Potential risk and or cost can arise from uncertainty of the government's financing strategy.

52. The MTDS operationalizes the government's debt management objectives, to include:

- Ensuring the government's financing needs and payment obligations are met in full;
- Cost and risk preferences;
- Achieving a desired debt portfolio composition e.g. cost and risk taking into account constraints;
- Development of the domestic government securities market.

Objectives are not stagnating as the priority of funding, cost, and or risk can change in different fiscal and or macro-economic environments e.g. budget surplus.

53. The scope of the MTDS covers central government's non-financial public sector. This comprises the debt of the central government to include, (i) budgetary, (ii) extra-budgetary, and (iii) social security funds, the state and local governments, and the debt of non-financial public corporations.

A. MTDS Positive Outcomes

54. A MTDS provides a framework within which the authorities can make informed choices on how the government's financing requirement should be met, while taking due account of constraints and potential risks. Such a systematic approach to decision-making can help strengthen the debt management function, enhance analytical capacity, and help reduce operational risk even where capacity is constrained.

55. The MTDS is a framework for debt managers to make informed decisions as to cost and risks associated with alternative strategies that are consistent with the medium-term strategic objectives. Clearly established and understood medium-term objectives provide a setting for debt managers to avoid decisions based solely on cost.

56. The ability and process to identify and manage risks within alternative financing strategies ensures that the debt management decisions on potential new funding opportunities are capturing the medium-term strategies cost and risk preferences and constraints e.g. domestic securities underwriting capacity.

57. A MTDS should clearly state institutional arrangements and coordination between the fiscal and monetary authorizes so to understand each agency's objectives and constraints. Thus enabling a clearly articulated environment whereby debt and monetary activities and operations are separate. Furthermore and importantly, market participants will recognize these sets of separate objectives and actions.

58. A formal debt strategy and its dissemination will generate a greater awareness by the public of the government's debt management objectives, its rationale, and debt management responsibilities and governance.

B. MTDS Core Principles / Enabling Framework

59. **Legal framework** should clearly state the authority to borrow, issue new debt, and conduct transactions on the behalf of the government. As it is the Ministry of Finance's authority to borrow on behalf of the government, the legal framework should set out the inter-agency unit that is responsible and accountable for debt management activities. It should also disclose the specific coordination amongst the agents involved in debt management, e.g., a fiscal agency role of the central bank.

60. The debt management unit responsible for debt management policies and implementation should ensure there is sufficient and comprehensive information to be effectively released. Typically this is done through periodic reporting by the debt managers on progress of the implementation of the debt management strategy and associated borrowing plan.

61. A requirement to develop a debt management strategy and once the debt management objectives are set, these objectives must be translated into an operational strategy that will provide a framework for how the government will achieve its debt management objectives.

62. Reporting requirements should be stipulated on an annual basis covering an evaluation of outcomes against stated objectives and the determined strategy. Also, external audit requirements.

63. **Institutional arrangements** and structure for good governance needs to be established and explained as to the roles and responsibilities for the relevant agency and inter-agency involved in public debt management and decision making.

64. Consolidating debt management into one department with front, middle, and back offices functions can avoid duplications and strengthen accountability. It also facilitates the analysis and development of a strategy for the aggregate debt portfolio given that one unit is clearly mandated to perform this role and maintains the full set of information required to undertake such tasks.

65. When consolidating debt management responsibilities into one entity, clear internal divisions of responsibilities are needed to reduce operational risk. In particular, separation between front and back office activities is critical for reducing the risk of fraud in any organization undertaking financial transactions. In addition, it is important that staffs are held accountable

to a clear code of conduct and conflict of interest rules to ensure the integrity of the debt management operations.

66. Given the fact that MOF's Treasury Department conducts the cash management function and is separate from the PDEFD, cash management projections and actuals should be sent to the PDEFD, at least, on a weekly basis. This could be a spreadsheet with:
    - Opening Position, *less* Outflows (expenses, debt service, payments to mature government securities, etc.) = Interim Position, *plus* Inflows (revenues, other receipts, T –bill and government bond receipts = Closing Position.

67. Typically the central bank the will be the fiscal agent for the MOF to conduct primary auctions for government securities, as well as any other required market activities for the MOF, as the central bank runs the payment system and holds the custodial accounts. It is generally recommended that the central bank act as the fiscal agent, as is the case in Georgia, for bond market integrity and economies of scale. This institutional arrangement could be documented in an inter-agency agreement or a Memorandum of Understating (MOU).

68. **Sound debt management systems** and debt recording are vital with comprehensive and accurate information on the total public debt portfolio for debt reporting and analysis. A centralized data system is preferred which contains all of the government's debt obligations.

69. A robust debt recording system should provide for an accurate, consistent, and comprehensive database of domestic, external, and government-guaranteed debt. A good debt recording system would readily provide the following:

    - An accurate breakdown of the outstanding debt by various characteristics, including currency composition, creditor composition, concessional, and instrument composition including interest rate type;

    - Aggregate debt servicing schedules across various categories of debt;

    - Some basic portfolio indicators should be available, such as average term to maturity, proportion of domestic and foreign currency debt, average interest rates, redemption profile, and debt and risk indicators (see paragraph 89)

    - Payment schedules for interest and amortization of individual loans and securities, along with the associated payment notices. This can be decentralized if management is spread across different contracting entities;

    - Ideally, the system would also interface with other key systems including (i) the payments system used to make debt-servicing payments; (ii) the transaction management system; (iii) the auction system, and (iv) the government's financial management information and accounting system(s).

    - In addition, it should be possible to ensure the integrity of the system by imposing appropriate security controls.

C. MTDS Macroeconomic Coordination

70. In developing a MTDS the macroeconomic framework needs to be taken into account and that the MTDS is consistent with the macroeconomic environment by ascertaining feedback through coordination.

71. **Fiscal Policy.** The public debt levels are predicated by the fiscal policy implications and the public debt composition will be an out product of the fiscal needs. Essentially the funding instruments availability, depth, and constraints to fund the fiscal requirement will be a key factor in the debt composition.

72. **Debt Sustainability & Fiscal Planning.** Debt sustainability analysis (DSA) will assess whether the fiscal policy implied by the Medium Term Fiscal Framework, and the associated debt level, is sustainable over the long-term. The DSA debt ratio outcomes consist of changes in the projected primary balance, GDP growth rate, exchange rates, and impacts of potential macroeconomic shocks. The MTDS can strengthen fiscal planning by contributing an analysis of the likely and possible budget implications from implementing the MTDS.

73. **Monetary Policy.** The monetary authority's policy stance, instruments used for monetary policy operations and liquidity management, and the central bank's effectiveness in its policy objectives, all have considerable impact on the MTDS. The domestic yield and its slope is the expression of investor's willingness to except the inflation risk for longer dated securities. The risk premium and its magnitude e.g. upward slope, attached to securities along the medium to long end of the curve are a product of monetary policy and the effectiveness of policy operations. The central bank's ability to manage liquidity and ensure price stability will moderate the risk premium and provide the government with cost effective long-term finance and extension of the government yield curve. In the environment where the central bank is issuing debt for sterilization of liquidity, the MTDS should take into account the potential to replace central bank debt with government debt should the fiscal need allow.

74. **Exchange Rate Policy.** Exchange rate policy, and the expected balance of payments will affect the real exchange rate and have potential implications for the MTDS. Exchange rate dynamics and volatility could potentially negatively affect the government's costs for servicing external borrowings and where the domestic markets are underdeveloped and the government's main source of financing is in foreign currency. Thus the government's external debt exposure can be more vulnerable to macro shocks.

75. **Domestic Debt Markets.** The trade-offs between borrowing domestically or externally will be determined by the level of development of the domestic debt market as well as any potential private sector crowding out considerations. The MTDS should identify the key challenges in this area, and the chosen strategy can help address those challenges e.g. a long-term objective of increasing the percentage of domestic debt to the total public debt portfolio.

IV. MTDS RISK INDICATORS AND TARGETS

76. Developing a coherent debt management strategy requires well-defined cost and risk elements. It is important that debt managers are clear about what exactly is captured by specific cost and risk measures so that the most appropriate measures are selected for a given objective.

A. Risks Associated with Public Debt Management

77. **Market Risk:**

Refers to the risk of increases in the cost of the debt arising from changes in market variables, such as interest rates and exchange rates. The most common types of market risk are the interest rate risk and exchange rate risk.

78. **Interest Rate Risk:**

The risk of increases in the cost of the debt arising from changes in interest rates. For both domestic and foreign currency debt, changes in interest rates affect debt-servicing costs on new issues when fixed rate debt is refinanced, and on existing and new floating rate debt at the rate-reset dates. Typical measures of interest rate risk include duration, average time to re-fixing, and the share of floating rate debt to total debt.

79. **Foreign Exchange Rate Risk:**

The risk of increases in the cost of the debt arising from changes in exchange rates. Debt denominated in or indexed to foreign currencies adds volatility to debt servicing costs as measured in domestic currency owing to exchange rate movements. Measures of exchange rate risk include the share of foreign and domestic currency debt to public total debt, and the ratio of short-term external debt to international reserves.

80. **Refinancing Risk:**

The risk of the inability to refinance maturing debt and/or at exceptionally large increases in government funding costs, the latter is a type of interest rate risk. Applicable indicators include average time to maturity (ATM), percentage of debt outstanding in 12, 24, and 36 months, and the full government debt redemption profile.

81. **Liquidity Risk:**

Refers to a situation where the volume of liquid assets diminishes quickly as a result of unanticipated cash flow obligations and/or a possible difficulty in raising cash through borrowing in a short period of time. Common methods to mitigate liquidity risk is maintaining a cash buffer in the government's account e.g. cash against a predetermined forthcoming expenditures.

82. **Credit Risk:**

Refers to the risk of non-performance by borrowers on loans, financial assets, and financial contracts. Also to include, bids accepted in the primary market for government securities, credit guarantees, and derivatives used for active debt management.

83. **Operational Risk:**

Refers to a range of different types of risks, including transaction errors in the various stages of executing and recording transactions; inadequacies or failures in internal controls, or in systems and services; reputation risk; legal risk; security breaches; or natural disasters that affect the debt manager's ability to pursue activities required to meet debt management objectives.

B. Recommended Debt & Risk Indicators for Public Debt Management

84. The main risks faced by public debt portfolios relate to market risk, which includes interest rate and exchange rate risk, refinancing risk, and liquidity risk. The risk exposures of a public debt portfolio are determined by the composition of the debt portfolio, including the share of short-term debt versus longer-term debt in the portfolio, the variable interest rate debt relative to fixed rate debt, and debt denominated in foreign currency.

85. The debt and risk indicators employed and recommended in public debt management are as follows:

86. **Interest Rate Risk:**

- **Ratio of fixed to floating rate debt.** The percentage of fixed rate and floating rate debt to the total the public debt composition.

- **Average Time to Re-fixing of Debt (ATR).** Gives information on the exposure of the debt portfolio to changes in interest rates. High ATR will indicate low risk, because this will imply that a relatively low share of the debt will have its interest rates re-set in a short period of time.

- **Amount of or share of debt re-fixing in a given period.** Quantifies the absolute amount of floating rate debt to be re-fixed and the amount exposed to interest rate fluctuations in a determined period e.g. 12 months.

87. **Refinancing (roll-over) Risk:**

- **Average Time to Maturity (ATM).** Gives information on the length of the debt's life, i.e. average residual maturity. No account is taken of interest payments in the calculation of ATM, and future repayments are taken in nominal value at the date they are maturing, no present value calculation is undertaken. ATM is a measure for rollover risk because it takes into account in full the residual maturity of floating rate debt.

- **Redemption profile of outstanding debt stock.** The redemption profile is not a numerical indicator, but a graphical one: it can be depicted on an annual, monthly or daily basis. By studying the shape of the redemption profile it is possible to make a qualitative analysis of the rollover risk of the debt, i.e. whether large amounts of debt service are concentrated in a few maturities. Also, when choosing the maturity of new borrowing the redemption profile is useful in pointing out maturities where only limited amounts are outstanding.

- **Ratio of debt falling due within 12-months.** A supplement to the redemption profile is the amount and share of debt falling due within twelve months—taking the total amount of debt falling due within one year regardless of it original maturity—to total debt outstanding.

88. **Foreign Exchange Risk:**

- **Ratio of foreign currency debt to total debt.** This ratio is the FX exposure as a percentage to the total public debt composition.

- **FX currency liabilities to foreign currency reserves.** This indicator measures external liabilities to foreign currency reserves and the reserves adequacy for facing external debt payments in crisis environment.

- **Ratio of external debt to exports.** This ratio measures the foreign debt level as a proportion of exports of goods and services. It shows the debt burden level over exports or the capability of acquiring currencies.

89. **Liquidity Risk:**

- **Ratio / proportion of short-term debt maturing within a period to the treasury balance (buffer).** To hold a minimum balance or surplus in the Single Treasury Account (STA) against an amount of expenditures in a given period to mitigate any potential unexpected drop of inflows.

- **Short-term external debt to international reserves.** An indicator on reserves sufficiency in order to assess a country's capability to avoid liquidity crises. The relationship between reserves and short-term debt is a key parameter to assess the vulnerability of countries with a considerable, yet limited, access to capital markets.

90. The strategic benchmarks can quantify the targeted risk characteristics of the debt portfolio either in terms of specific magnitudes or more often specific ranges. It is suggested and commonly practiced by governments in the first release of its MTDS to provide the desired direction of the portfolio composition with target ranges to allow for a degree of flexibility.

C. Trends in Debt Management Debt & Risk Indicators

91. A major shift in debt management strategic targets/benchmarks occurred post 2008 financial crisis where refinancing risk was sighted by 66% of debt offices as a risk to manage. A typical off shoot of a financial crisis, whether caused by debt, currency, or financial institutions imbalances, is a potential credit freeze in the financial system. Thus debt managers wanted to reduce the amount of debt falling due in a given short-term period e.g. 12-months (figure 11).

Figure 11: Strategic Targets/Benchmarks

Source: Survey on Debt Management Strategies, World Bank, 2013

92. With refinancing risk (roll-over) a strategic target to manage by 66% of debt managers, the debt issuance strategies were to issue or increase the volume of medium to long-term government securities to extend the yield curve and increase in the average term to maturity of the public debt composition (figure 12).

Figure 12: Average Term to Maturity of Outstanding Marketable Bonds

93. G7 countries have as lightly higher percentage of debt falling due within 12, 24, and 36 months, due in part to having robust financial markets, efficient primary markets, and effective underwriting capacity, (figure 13).

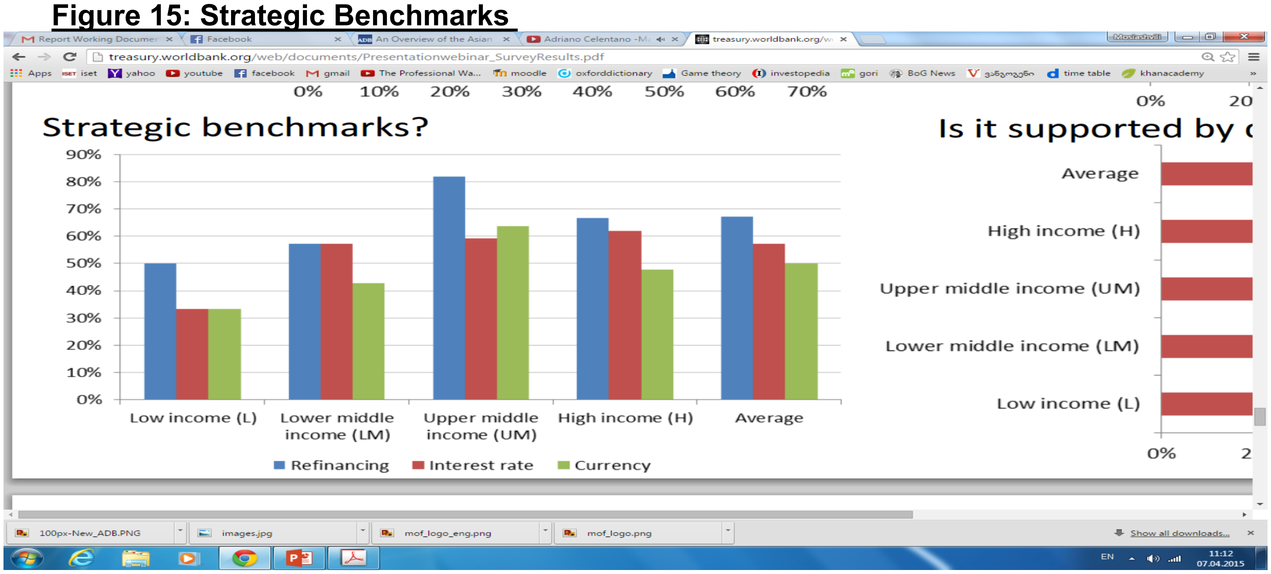
Figure 13: Total Redemption as a Percentage of Outstanding Debt

94. Debt manager's strategies in managing refinancing risk (roll-over) resulted in an extension of the yield curve, an increase of the average time to maturity, and a reduction of the redemption profile falling due in 12-months, requiring a reweighting of the ratio of T-bills to bonds. The ratio of T-bills to bonds in 2008 stood at 18% while in 2014 fell to 12%, (figure 14).

Figure 14: Maturity Structure of Central Government Marketable Debt for OECD Area

95. Figure 15 categorizes countries by income group and the country's percentages for targeting refinancing, interest rate, and currency risks e.g. 66% refinancing risk. The higher level of income and level of indebtedness in a country appears to increase its probability of having a debt management strategy and strategic benchmarks.

Figure 15: Strategic Benchmarks



Source: Survey on Debt Management Strategies, World Bank, 2013

VI. DEBT AND CAPITAL MARKET DEVELOPMENT AS A MTDS OBJECTIVE

96. To facilitate the implementation of a debt management strategy, commonly practiced and recommended is that an explicit goal of the debt management strategy is to promote the development of the domestic government securities market by creating the conditions for developing money markets, primary markets, the investor base, secondary markets, custody and settlement systems, and debt market regulation. The development of the domestic debt markets is a long-term endeavor and a gradual process needing policy level support and coordination from the fiscal and monetary authorities.

97. MTDS policy objectives that include the government securities market development are diverse and a selection of the focus is as follows:

- Support the development of the domestic government securities market;
- Support the development of the local capital markets;
- Maintain an adequate stock of government securities e.g. in a balanced or surplus fiscal balance the government may retire debt but maintains a sufficient stock of debt;
- Promote secondary market liquidity of government securities e.g. appropriately placed and adequately stocked benchmark series;
- Provide monetary policy operation tools.

98. The domestic government yield curve is the basis for pricing/evaluating all forms of credit in the domestic economy and capital markets. The emergence of the government yield curve will be the result of an active issuance program, as well as active trading of existing maturities as they progress to maturity. At any point in time, a market participant can “derive” a yield curve through observing yields on new issues and on secondary market trading of existing issues along the maturity spectrum and “filling in the gaps” through interpolation and extrapolation (figure 16).

99. It is recommended that the Georgian local currency government yield curve be crated and developed and all relevant and available bond market information be centralized into an entity e.g. a market association. The location and initiating seed resources for the entity would be determined by the NBG and MOF.

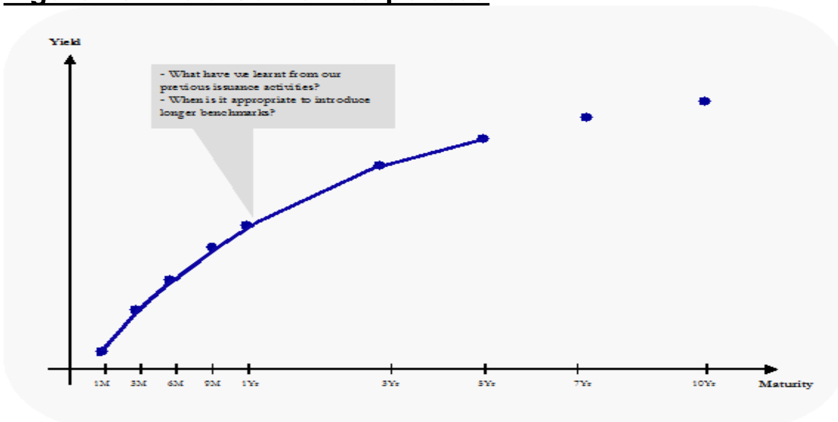
100. The market association would be responsible for compiling and disseminating market information as well as the following functions:
    - Center for all market information e.g. primary and secondary market activities both government and corporate securities.
    - Create, develop, maintain, and dissemination a daily or weekly government yield curve;
    - Establish a market code of conduct;
    - Establish, document, and disseminate bond market standards and conventions;
    - Develop secondary market trade reporting requirements;
    - Establish a link exclusively for non-resident investors (paragraph 107);
    - Provide education and trading for bond market development;
    - Determine the need, requirements, and which entity will be responsible for market oversight and enforcement.

101. For public debt managers the government yield curve provides a source for pricing and determining cost:

- Based on the current interest rate environment and the relevant government bond benchmark's yield provides the sovereign issuer with relatively accurate price or cost (coupon rate) it will have to pay in the primary market.

- If the strategy is to lengthen the average time to maturity and or set new long-term benchmarks the longest current outstanding benchmark provides the debt managers with a cost assessment of issuing a new long dated benchmark through interpolation (figure 16).

Figure 16: Yield Curve Interpolated



102. As the Government yield curve becomes more complete, benchmark government securities provide a pricing reference for other non-government issuers. For example, the Government securities yield curve provides a pricing reference for corporate bonds and, in so doing, gives impetus to the development of the corporate bond market and potentially reduces the cost of capital in the economy. Corporates typically issue medium-term securities (3–5 years), but they can also be active at the shorter end of the yield curve as well as out to 10 years. In economies were information on corporate credit standing is not well developed or disseminated, corporates may only, at the early stages, be able to issue short-term securities e.g. commercial paper less than one-year.

103. Typically and recommended that a government's debt policy objective states the promotion of a diversified investor base in the domestic debt market so to:

- Broaden demand from varied sectors/investors, including non-resident investors, with different demand needs to stimulate competition in the primary and secondary markets so to realize, over time, cost efficiencies for government debt issuance.

- Different investor time horizons e.g. asset liability management, allows for cost efficient extension of the government yield curve as well as competition for varied benchmarks.

- Potentially reduces foreign debt as a percentage of the total public debt portfolio by increasing domestic debt as a percentage of the total stock of debt.

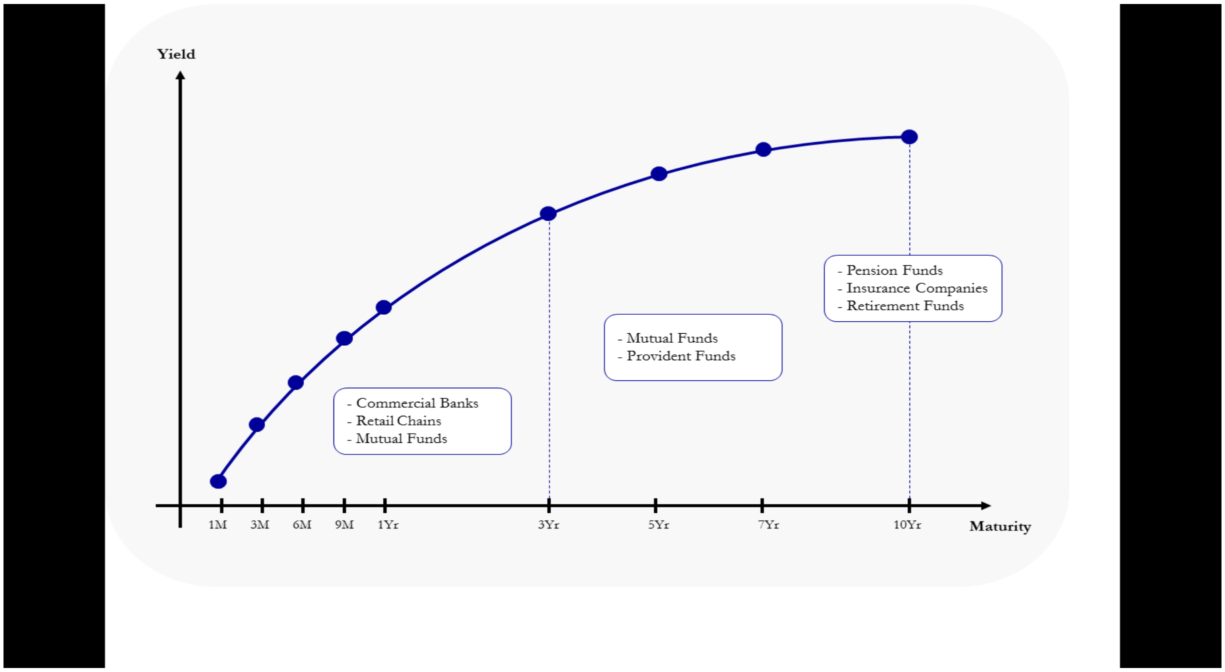
104. Typical concerns by non-resident investors which should addressed through the relevant authority's website, to include: (i) Central bank's exchange rate regime; (ii) Capital controls if they exist; (iii) Ability to repatriate their investment upon liquidation, same as capital controls; (iii) Access to the primary market or secondary market to purchase government bonds; (iv) If a non-residents need to purchase bonds in the primary market via domestic banks would the banks be willing to do so and or are they mandated by the relevant authority to facilitate non-residence transactions; (v) Secondary market liquidity or ability to buy or sell at "fair value"; (vi) Market infrastructure - clearing, settlement, and custody integrity.

105. Many institutional investors will seek assets that they can use to more effectively hedge their liabilities in domestic currency denominated T-Bills and Government bonds to potentially improve asset-liability management. More efficient asset-liability management translates to a low-cost and less risky private sector. But investors have different time horizon, risk, and liquidity preferences, (figure 17).

106. To analyze demand, the yield curve can usefully be categorized into three distinct "investor habitats":

- *Short-term maturities (less than 3 years): Commercial banks, retail clients, and mutual funds can be expected to have a high demand for domestic currency denominated T-bills and government bonds with maturities less than 3 years.*
- *Medium-term maturities (3–7 years): Mutual funds and provident funds (employment related funds but not necessarily for retirement) are often significant buyers of medium-term government bonds.*
- *Long-term maturities (7–30 years): Pension funds, insurance companies, and retirement funds are typically seeking longer-dated assets to hedge their liabilities, which are usually of a longer-term nature.*

Figure 17: The Investor Habitat



107. While bank demand will underpin the development of the government securities market in the early stages of development, the extension of the yield curve is ultimately a product of widening distribution channels and increasing the participation of the non-bank institutional investor base in the primary and secondary government securities markets. For this to occur, the MTDS, over time, will assess the market demand and seek to issue sufficient volumes in benchmark government bonds to achieve a wider ownership distribution across the yield curve.

108. A common and recommended government securities market development strategy, states as an objective to provide an adequate stock of varied short-term benchmark series e.g. 3, 6, 9, 12 month T-bills to provide tools for monetary policy operations.

109. Public infrastructure and investment plans may require medium to long-term financing, assuming an upwardly sloping domestic yield curve it would imply accepting the incremental cost / yield for long-term securities. A mitigating factor is effective monetary policy operations, which potentially reduces the risk premium for long-term debt and providing the government with cost effective financing. Adequate stocks of short-term government securities specifically T-bills, less than one year, are instrumental in central bank's open market operations.

110. The National Bank of Georgia (NBG) is issuing 3-month and 6-month CDs for liquidity management. In collaborations between the MOF and the central bank it has been generally agreed and suggested that in the medium-term the PDEFD will issue 6-month T-bills and eventually 3-month T-bills to replace NBG CDs and ultimately the entire domestic yield curve will comprise government securities.

111. The international capital markets are a source for government funding in foreign currency:

- Georgia has partially graduated from multilateral concessional finance, which may require a continued presence in the hard currency capital markets e.g. US$, Euro, Yen, due to a lack of domestic market depth;

- Some governments issue FX benchmarks to serve as pricing mechanisms for credit worthy state enterprises e.g. national airline or private sector corporates e.g. large manufacturing companies exporting in the same currency as issuance;

- FX benchmarks potentially may not prove useful if one-off or very infrequent issuances as the security may be held by a small number of investors thus highly illiquid and artificially expensive;

- International issuances are resource intensive, with substantial transaction fees, and timing of launch is subject to market conditions, which can hinder the debt manager's ability to finance, in terms of timeliness and volume, the government's funding requirement.

VII. RECOMMENDED ACTIONS/STEPS IN DEVELOPING & DESIGNING A MTDS

Step 1: Identify the Objectives and Scope of the MTDS.

Objective: Identify the main objectives for public debt management and define the scope of the MTDS.

112. Clearly articulated debt management objectives, from a policy level, are the essential starting point for development a coherent MTDS. The objective's priorities may vary over time and in varying environments e.g. in a fiscal stimulus (deficits) environment ensuring the governments financing requirements and payment obligations may weigh in as the primary policy objective. Conversely, in a balanced or surplus fiscal environment cost reduction/minimization of the debt portfolio or maintaining an adequate stock of domestic debt for the development of the government securities market may take top priority. Also, the debt managers should understand the implications the MTDS may have on monetary policy e.g. domestic debt issuance and the supply of short-term Treasury bills as instruments for monetary policy operations.

113. The MTDS should clearly define the scope for the strategy, total external and domestic direct central government debt at a minimum. The scope of the strategy may expand, as information becomes more available or institutional arrangements broaden e.g. government guarantees.

Output:
- Description of the debt management objectives.
- Description of the MTDS's scope.

Step 2: Identify the Current Debt Management Strategy and the Cost & Risk of Existing

Debt.

Objective: Identify the current debt management strategy, the outstanding debt and its composition, basic cost, and market risk indicators.

114. Identifying the current debt management strategy provides a basis for developing alternative strategies. Without a formal debt management strategy in place, the current debt strategy can be a description of the existing borrowing practices.

115. Gathering, from the debt database, and documenting in the MTDS the current stock and composition of the government's debt portfolio is necessary for understanding the structure of the debt portfolio and provides the basis for expressing the public debt evolution. The basic data would include, total stock of outstanding debt, currency composition, creditor types, instruments types e.g. fixed, floating, bullet, or amortizing. Build a debt service and maturity profile for the basis for forward debt planning and servicing.

116. Identify and analyze the stock of debt as to cost and risk. Using cost and risk indicators and given the pre-established debt management objectives identify any vulnerabilities within the current debt portfolio e.g. interest and exchange rate, composition of currency, short-term debt, and variable to fixed.

Output:
- Detailed information on outstanding debt.
- Debt servicing profile of outstanding debt.
- Description of main portfolio risks.

Step 3: Identify and Analyze Potential Funding Sources.

Objective: Identify potential sources of finance, their characteristics, amounts available, and appropriateness.

117. Identify the characteristics of all funding sources / instruments available and determine the cost and risk aspects. Also, define the use of such instruments and their appropriateness for the specific funding requirements e.g. budget or project financing.

118. Accessing the international capital markets for financing, the debt managers must factor in indirect costs such as legal or financial advisory services necessary to achieve a successful issue. Also, consider the potential cost benefits of certain instruments that entail advisory or TA and project management support e.g. bi-lateral and multi-lateral sources. Assess if there are any limitations on the quantity that could be borrowed from these sources going forward, or the conditions under which its availability might change. These could include international capital market's conditions and any potential reduction and or sudden stop to bi-lateral and multi-lateral financing.

119. Within the context and time horizon of the MDTS the use of new financing instruments and the timing of use should be taken into consideration e.g. introduction to new international capital markets, longer tenors, or extension of domestic government securities benchmark maturities. The debt managers should be in close consultations with policy makers, market participants, and the central bank on new product considerations and the impact it may have on the government's debt portfolio as well as implications for developments of the domestic and international capital markets.

Output:
- An assessment of the characteristics, including the cost and risk, of all available and potential financing instruments.
- An identification of any constraints, such as issuance size or inflexibility in timing, relevant to the MTDS.

Step 4: Identify Baseline Projections and Risks in Key Policy Areas

Objective: Identify the baseline projections for key fiscal, monetary, and external policy variables, market rates, the main risks to these projections, and the constraints and implications for MTDS formulation.

120. The debt managers should need a good understanding of the macroeconomic framework in which the MTDS is established and its impact on decision choices. The projections used in the debt sustainability analysis will serve as general baseline macro variables.

121. The debt managers should be clear about the expected fiscal path of the primary balance, the factors underlying this projection, including anticipated government revenues and expenditures, and economic growth.

122. Monetary policy and external factors needs to be taken into consideration, consult with the monetary authorities to understand their policy stance, exchange rate, and balance of payments developments. The monetary authority's actions and its reliability to carry out its policy objects needs careful consideration as to the potential cost impact on the slope of the domestic government yield curve and short, medium, and long-term domestic debt issuance planning.

123. With a determined baseline the debt managers should recognize relevant risk scenarios, which could potentially impact the quantity and cost of funding needed. Where external finance has been a country's major source of meeting the government's funding requirements, including bi-lateral, multi-lateral, and international markets, the debt managers should consider the potential risk of a reduction of availability or worst case a "sudden stop", which could heighten rollover risks.

Output:
- Baseline projections for key fiscal, monetary policy, external, and market variables.
- A clear and comprehensive set of country specific risk scenarios to be tested.

Step 5: Review Key Longer-Term Structural Factors.

Objective: Review structural factors that could potentially influence the desired direction of the debt composition over the long-term.

124. The debt managers should identify, in consultation with economic policy-makers, long-term structural features of the economy that may influence the desired debt composition, these could include the following:

- The economy's dependence on commodities, and the vulnerability to developments in commodity prices;

- Longer-term prospects of continued access to concessional finance;
- Possible long-term trends in the real effective exchange rate; and
- Long-term inflationary trends.

Output:
- Articulation of long-run structural factors that the MTDS should take into account.

Step 6: Assess and Rank Alternative Strategies on the basis of the Cost-Risk Trade-off.

Objective: Identify and analyze possible debt management strategies, assess their performance, and choose a small number of candidate debt management strategies.

125. Identify a small set of relevant strategies, and assess these under the constraints and future scenarios for the primary balance and market rates previously determined. Then identify alternative compositions and strategies that may mitigate any potential key vulnerability. Also, consider strategies that develop the domestic debt markets.

126. Without being, at first, overly quantitative the debt managers should consider what types of debt and or debt composition could mitigate any sources of volatility to the budget or buffers, which may help lessen the impact of risk. For example, if the country is exposed to external shocks and the real exchange rate is volatile or at risk of a downward trend, the debt managers may want to avoid worsening that by reducing external financing portion of the debt composition. This would allow the debt managers to *specify the preferred direction of specific risk indicators*, such as increasing the share of domestic currency debt or lengthening debt maturity profile.

127. Access to quantitative tools e.g. MTDS Analytical Tool (MTDS TA), would allow for debt managers to assess alternative cost and risk strategies over a specific time horizon. Also, include scenario analysis of specific shocks or risks identified as well as the shocks considered in the DSA. The time horizon evaluation should consider economic stability e.g. stable economy a shorter-term horizon or unstable economy a longer-term horizon.

128. Once the cost and risk assessment of the relevant strategies are completed, the results should be summarized with graphics and presented to the policy authorities or committee for review.

Output:
- A ranking of a small number of candidate strategies in terms of cost and risk.

Step 7: Review the Implications of Debt Management Strategies with Fiscal and Monetary Policy Authorities.

Objective: Ensure that relevant feedback from the strategies identified is provided to the fiscal and monetary policy authorities. Review the potential debt market implications of the strategies.

129. The strategies, and their associated cost and risk implications, should be reviewed with the fiscal policy authorities for potential risks to the budget or debt sustainability and should vulnerabilities arise, adjustments to the strategy would be necessary.

130. Equally, potential implications the strategy may have on monetary conditions needs close coordination with the central bank as well as the possibility of the strategy helping

meet monetary policy objectives e.g. T-bill supply for central bank operations. Also, the anticipated amount of foreign currency needed may have an effect on the exchange rate and interventions by the monetary authority.

131. The preferred MTDS, including the financing from domestic and international markets, should be reviewed with the monetary and financial market authorities to assess the impact on investment activities from the key investors and the potential implications for capital market development and financial stability.

Output:
- A clear assessment that the candidate strategies are consistent with fiscal and monetary policies, maintaining debt sustainability, and are in line with plans for market development.

Step 8: Submit and Secure Agreement on the MTDS

Objective: Identify the preferred MTDS and send the proposal to the highest authority responsible for debt management approval.

132. The MTDS should be approved by the relevant highest authority e.g. Minister of Finance as it will represent the government's preferred risk tolerance. Upon approval, the debt management strategy should be formalized and an explicit mandate given to the debt managers to implement the strategy.

Output:
- An approved MTDS.

A. Dissemination of MTDS

133. Once the MTDS is agreed and approved, especially for a first time MTDS, it is suggested the Ministry of Finance provides a press release or *impact announcement* to notify creditors, investors, credit rating agencies, and key stakeholders so to facilitate open dialogue as to the strategy's rationale and direction.

134. A typical published document describing the MTDS would highlight the following: (i) the objective and scope of the MTDS; (ii) a description of the current and expected macroeconomic environment; (iii) an evaluation of the existing stock of debt; (iv) and an outline of the agreed MTDS, with a discussion of factors that influenced the choice of strategy, including the key risk factors that the MTDS is focused on managing.

135. The MTDS could be expressed through targets for a specific instrument composition or specific indicators of cost or risk. *At the initial stages, the indicators could be more descriptive* e.g., the desired MTDS direction is to increase the share of domestic currency debt and or gradually extend maturities. Over time, the targets could become more specific and precise, e.g., setting a portfolio target of a percentage of the domestic currency debt to total debt.

B. Implementation and Strategy Monitoring

136. Upon agreement of the MTDS, the PDEFD should develop an internal annual financing plan outlining how the strategy will be implemented over the fiscal year. The funding requirement will be determined through the budget process, and allocation of the funding

need during the fiscal year will be determined by the government's cash flows. This requires strong inter-agency coordination and reporting requirements between the Treasury Department, conducting cash flow forecasting, and the PDEFD.

137. At the aggregate level the total amounts to be raised through each of the available sources can be determined based on the strategy:

- The percentage of external debt to the total funding need; and
- The percentage of domestic debt issuance to the total funding need.

138. This then needs to be broken down into more specific targets based on the PDEFD's interactions with funding sources and knowledge of the sources availability, volumes, and market depth:

- The percentage of external concessional debt;
- The percentage of FX debt issuance in the international capital in the capital markets;
- The percentage of T-bills and medium to long-term domestic bonds; and
- If the domestic issuance strategy over time introduces new instruments e.g. indexed bonds, then will need to be factored in as part of the domestic allocation.

139. The annual financing plan generally begins with the anticipated budget flows, including projected debt servicing, debt redemption to mature or to re-finance within the fiscal year, and the starting balance of the Treasury Single Account (TSA).

140. The analysis and understanding of the starting treasury balance, funding requirement, and anticipated cash flows allows for the PDEFD's debt managers to plan its annual domestic government securities issuance calendar. The calendar will be published as per existing debt issuance procedures and fiscal agent arrangements.

141. For external financing the PDEFD will then need to assess external borrowing sources availability and timing of securing loans or tapping the international capital markets to secure the needed funding requirement.

142. The MTDS will need to be reviewed annually to confirm its relevance given the potential for changes in macroeconomic and market conditions. Should revisions to the MTDS be necessary due to fundamental macroeconomic shifts, a new strategy should be presented with a clear explanation of why the revisions are recommended.

143. Implementation could require strategic activities to start moving towards and or adjustments to achieve the desired portfolio composition:

- Issuing appropriate debt instruments tenors e.g. to lengthen ATM issuing longer dated domestic securities or a higher percentage verse short-term debt;

- Buybacks – older less liquid government bonds are purchased for cash. Typically a "reverse auction" is conducted as a competitive tender to repurchase older less liquid government bonds, where the Ministry of Finance places bids, via the fiscal agent, to the holders of securities. Typically buyback and new issuance operations are conducted same day;

- Switches (often referred to as exchanges) – older less liquid government bonds are switched for a new benchmark issue. Similar to buybacks, switch operations are typically conducted same day.

144. Bond buyback and switch operations serve two main purposes. First, by reducing the outstanding amounts of bonds close to maturity, switches and buybacks help in reducing rollover peaks and thus lowering refinancing risk.

145. Second, buybacks and switches allow debt managers to increase the issuance of new on-the-run securities by taking out of circulation old illiquid off-the-run issues. The resulting more rapid build-up of new benchmark bonds enhances market liquidity of these securities. In addition these operations may also contribute to lower funding costs for governments.

146. These strategic activities, should they be desired requires careful consideration of:

- Assess debt market and macroeconomics dynamics and conditions to determine whether these operations are in best interest of the domestic debt markets and do not potentially cause any market disruptions, anomalies, or volatility;

- Investor consultations will be recommended to first explain the mechanisms for buybacks and or switches and the debt management unit's rationale for executing these strategies;

- Debt management office's authority to conduct such activities will need to be stated in the public debt law and or amendments;

- The debt managers must assess the debt office's internal capacity to effectively and efficiently execute these activities;

- Coordination and consultation with the Ministry of Finance's fiscal agent e.g. central bank, is essential as these activities will be conducted by the central bank.

- Procedures for conducting buy-backs and or switches, much like auction and issuance procedures will need to be established if not already in place.

147. Progress reports on the implementation on the MTDS should be produced by the PDEFD's front and middle offices so that relevant policy officials and or responsible committees are well informed on the evolution of the debt portfolio as articulated in the strategy. Also, it provides good risk management oversight.

148. If there are fundamental shifts in macroeconomic or market conditions, the MTDS should be reassessed. The changing conditions should prompt the debt management unit to initiate new analysis and if required a new proposal should be submitted along with a clear explanation of why a revision and update of the strategy is recommended.

C. MTDS Document Structure

149. This section provides a general and typical components, sections, and sequencing of a medium-term debt management strategy document.

Objectives and Scope

150. Provide clear and concise descriptions of the public debt management objectives and the scope of the debt management strategy.

Existing Public Debt Portfolio

151. Provide the historical evolution of the government's debt portfolio and the current public debt composition along with narratives of the market variables and events leading up to the current environment.

Debt Management Strategy Forward Looking

152. Describe the environment for debt management in the future, including fiscal and debt projections, assumptions about exchange and interest rates and constraints on portfolio choice, including those relating to market development and the implementation of monetary policy.

153. Explain the debt strategy's rationale and the desired debt portfolio composition in terms of direction taking into account the risk factors and any limitations or constraints. Targets for the strategy's desired debt composition can be expressed in ranges for a degree of flexibility.

VIII. Debt Strategy Analysis and Scenario Building

154. Currently and recommended, the PDEFD's front and middle office staffs are using the medium-term debt strategy analytical tool (MTDS TA). The purpose of the tool is to support quantitatively the process of decision-making. The outputs are intended to inform and illustrate the consequences of following a particular debt management strategy under various scenarios or stress tests. The tool can be used to test the consequences of either following a specific financing plan or achieving and maintaining a specific debt composition, with the associated series of financing plans determined by the tool. In this connection, the tool can be used to highlight the relation between, on the one hand, the cost of various financing plans or debt compositions, and, on the other hand, the associated risk.

155. The tool is Excel-based and comprises four separate spreadsheets. A variety of cost and risk indicators are produced allowing the DM to consider cost-risk trade-offs of each alternative strategy. While the resulting cost-risk trade-offs help in the decision-making process by providing quantitative information, the tool is not meant to be the sole focus when making decisions. With outputs driven by the input assumptions, careful judgment must be applied to any interpretation of the results.

156. The purpose of the Analytical Tool (AT) is to provide quantitative analysis to guide the MTDS decision-making process. It has a spreadsheet-based structure developed on the basis of scenario-analysis models typically used by debt management offices, (i) projecting cash flows as a function of existing debt; (ii) macroeconomic assumptions, e.g., primary balances; (iii) new borrowing strategies; and (iv) financial variables, including interest rates and exchange rates.

Building Scenario Analysis

157. In scenario analysis and constructing cases for a debt management strategy is initiated with the strategy variables of (i) currency, and (ii) instruments. Then inputs of scenario variables to be, (i) volume of direct debt, (ii) market conditions for each currency – interest rate and foreign exchange rates, and (iii) slope of the domestic government yield curve.

158. The purpose of scenario testing governs the construction of the cases, as described below. One case becomes the base case or the main planning scenario. Test cases support the planning and budgeting process by providing the likely range of outcomes relative to the point estimate that is the base case. Another cluster of test cases can be described as risk evaluation tools, testing capacity to bear risk, evaluating potential exposures and combinations of exposures, and testing exposures to see if their potential extreme values are beyond an acceptable range even if they reduce costs significantly.

159. Essentially, the cases fall into two main groups. The first cluster is “probable”. The second cluster being one, where the exogenous variables are given values that are extreme, either extremely high or low or volatile and there is no attempt to assign probability of those values occurring, they are simply “plausible”.

160. **Probable Scenarios.** The best example of a case embodying the most probable values for the exogenous variables is the planning case, or the 'base' case. Typically, it represents the coordinated acceptance among those involved in the planning process for the values of such key exogenous variables as the net new financing and refinancing need, interest rates and the yield curve during the projection period, foreign exchange rates, and the new funding maturity distribution. It can reasonably be assumed that this case represents the values thought to be most probable, even if an explicit probability is not assigned to it. It is helpful for planners to work from a range of values thought to have a reasonably high probability of occurring, even if not as high as those for the 'base case'.

161. **Plausible Extremes.** Risk is not evaluated by only looking at the probable range of market conditions. Extreme conditions are far more likely to reveal risk exposures. The extreme values also depict risk exposures that are large enough to have serious repercussions on achieving the funding goals. When those outcomes are simulated, it becomes possible to draw the line on exposure limits, regardless of how much additional cost saving might be foregone in the short run.

IX. FISCAL TRANSPARANCY

162. The US Department of State has presented its FY 2014 fiscal transparency review in its Fiscal Transparency Report. The minimum requirements of fiscal transparency developed by the Department are disclosure requirements of:

- National budget documentation (to include receipts and expenditures by ministry), and;
- Government contracts and licenses for natural resource extraction (to include bidding and concession allocation practices).

The Government of Georgia was found to meet the minimum requirements of fiscal transparency in 2014.

163. In 2012, in consultation with the MOF, the World Bank carried out a Public Expenditure and Financial Accountability (PEFA) assessment. The PEFA assessment stated that Georgia has advanced significantly its budgetary and financial managements systems since the previous PEFA assessment Report of 2008. The basic set of systems has been put in place for strategic budget planning, budget formulation, and execution.

164. For fiscal transparency the MOF and specifically the Budget Department and the Fiscal Planning Department provides the public with the government's finances through its website, an annual Citizens Guide to the Budget, and an annual presentation on the Government's budget.

165. Fiscal information is available on a the websites of the respective Government bodies to include: (i) the Ministry of Finance, (ii) the State Audit Office of Georgia, (iii) the Competition and State Procurement Agency, and (iv) the Parliament. The National Bank of Georgia publishes comprehensive fiscal information, including monthly updated statistics on public external debt, net claims on central and local governments, and treasury securities.

166. Annual budget documentation is published on the MoF's website along with the in-year amendments and a budget draft is also placed on the website foreseeing all submissions. In-year budget execution reports within one month after the end of a quarter are prepared and submitted to the Parliament of Georgia and made public on the website immediately upon submission to the Parliament.

167. The Competition and State Procurement Agency releases all public procurement related information, namely public tender announcements, bidding documents, selection committee minutes, contract awards, contract amendments, contract implementation reports, complaints and respective conclusions by the Dispute Resolution Board.

168. Macro-economic indicators are a integral part of the budgetary documentation of which the information provided includes data on inflation, exchange rates, aggregated indicators of economic growth, national reports/accounts, balance of aggregated indicators of revenues and expenditures, and taxes.

169. Fiscal deficit foreseen is presented in accordance with Government Financial Statistics standards and sources of funding the deficit were characterized in the budgetary documentation as domestic and foreign.

170. The total forecasted volume of the debt is provided in the draft budget at the end of the year as well as planned internal and external debt financing sources, creditors, and instruments. Also included are historical and current snapshots of internal and external debt.

171. Reporting on financial assets at the beginning of the year includes information regarding the changes of financial assets historically, current, and forecasted.

172. Aggregated budget indicators for revenues and expenditures for past, current, planned, and forecasted are presented according as well as a 3-year forecast.

173. The draft budget provides comprehensive information about new initiatives of the government and priorities of state budget spending units and measures and activities implemented within their scope. Overview of macro-economic and fiscal boundaries are represented for past, current, and forecasted which includes information regarding the new

initiatives planned in respect to expected revenues. The Basic Data and Directions document together with the draft budget is submitted to the parliament, which includes the total program of the government and explanations of its initiatives and expected outcomes.

X. DEBT MANAGEMENT & ANALYSIS SYSTEM

174. A robust debt recording system should provide for an accurate, consistent, and comprehensive database of domestic, external, and government-guaranteed debt. A good debt recording system would readily provide the following:

- An accurate breakdown of the outstanding debt by various characteristics, including currency composition, creditor composition, concessional, and instrument composition including interest rate type;
- Aggregate debt servicing schedules across various categories of debt;
- Portfolio indicators should be available, such as average term to maturity, proportion of domestic and foreign currency debt, average interest rates, redemption profile, and debt and risk indicators.
- Payment schedules for interest and amortization of individual loans and securities, along with the associated payment notices. This can be decentralized if management is spread across different contracting entities;
- Ideally, the system would also interface with other key systems including (i) the payments system used to make debt-servicing payments; (ii) the transaction management system; (iii) the auction system, and (iv) the government's financial management information and accounting system(s).
- In addition, it should be possible to ensure the integrity of the system by imposing appropriate security controls.

175. The MOF has two debt data systems, Fiscal Forecasting Department's internally developed debt management system (eDEM) for domestic debt and the PDEFD's Debt Management and Financial Analysis System (DMFAS) for external debt. The Fiscal Forecasting recently upgraded the eDEM system to version II to accommodate greater analytical capability. It was indicated that the MoF's policy on debt systems is to develop and build systems internally with dedicated IT staff. The rational is that internally developed systems are considered more trust worthy and trouble-shooting turn around time is quicker than relying on external vendor system support.

176. The eDMS provides useful information on domestic debt for analysis and management: (i) debt portfolio composition; (ii) average time to maturity of debt stock; (iii) average interest rate of debt stock; (iv) payment schedule and debt service initiation (v) debt amortization; (vi)

auction details to include, bid-to-cover ratios, accepted ranges of bids, and the weighted average interest rate result.

177. Similarly, the external debt database provides: (i) debt portfolio composition; (ii) average time to maturity of debt stock; (iii) average interest rate of debt stock; (iv) payment schedule and debt service initiation; and (v) debt amortization.

178. Integration and migration of FX debt into the eDEM system, over the long-term, would be a considerable undertaking and requiring internal managerial will and appropriate dedecated resources e.g. additional staff. However, marketable FX debt could be added into the eDEM analytical database.

179. As to analytical capacity building for the debt management and analysis system would be to further develop the database with useful debt and risk indicators for both domestic and external debt, which should be consistent with the MTDS, and to build historical data series and graphics, to include (also see para 87 to 90):

- **Interest Rate Risk Indicators-**
    - Ratio of fixed to floating rate debt;
    - Average time to re-fixing of debt;
    - Amount of or share of debt re-fixing in a given period;
    - Average interest rate.
- **Refinancing (roll-over) Risk Indicators-**
    - Average time to maturity;
    - Redemption profile of outstanding debt stock;
    - Ratio of debt falling due within a period e.g. 1-year.
- **Foreign Exchange Risk-**
    - Ratio of foreign currency debt to total debt;
    - FX currency liabilities to foreign currency reserves;
    - Ratio of external debt to exports.
- **Liquidity Risk-**
    - Short-term external debt to international reserves.
- **Domestic Government Securities Auctions-**
    - Auction Database would contain information on all offerings by the sovereign on each auction date; on all bids; on all bidders to the extent available; on all awards; on all settled transactions and ‘fails’ to settle; and on market conditions.
    - Enter and maintain government securities auction details to include: (i) bid-to-cover ratios; (ii) accepted ranges of bids: and (iii) weighted average interest rate result.
    - Create and maintain a historical graphs on auctions to include:

- The accepted range of bids for T-bills and government bonds so to identify primary market efficiencies and market demand. If over time the accepted range narrows the market is more efficient and the security on offer is in good demand. If the converse pattern of widening spreads occurs it would indicate weak demand;

- Similarly, plot the bid to cover ratios for the auctions to identify primary market demand for a given security on offer. If over time the bid to cover ratios for a specific security increases e.g. 2, to 3, to 4 times, this indicates market efficiencies and good demand for the security on offer. If a security consistently, and not one off, has weak coverage ratios e.g. 1 times, it could be a candidate for eliminating from the debt issuance strategy.

- **Government Securities Yield Curve-**

- The National Bank of Georgia is planning to develop domestic government securities yield curve initially based on primary market auctions pricing and interpolation, and eventually plotting secondary market transactions when volume is sufficient. This is very usefulness for the debt manager's domestic debt planning and analytical capacity so to build into their interest rate scenario simulations the slope of the yield curve either increasing (steepening) or decreasing (flattening). Also, the yield curve provides a comparison for each security's maturity and the expected cost along the curve e.g. short-term to long-term. There is a correlation, over time, between the yield curve's slope and the debt portfolio's average time to maturity as debt managers seek to extend the ATM when cost effective..

    - It would be useful to integrate, over time, the yield curve data and structure into the PDEFD's and FPD's analytical tools.

180. As previously mentioned, the PDEFD's front and middle office is using the medium-term debt strategy analytical tool (MTDS TA). It would be suggested that in time an internal analytical tool be built into the main database. If the tool were separate from the database it would need to be feed updated data to minimize manual inputs and potential errors.

APPENDIX 1: NEW SECTIONS SUGGESTED FOR MTDS DOCUMENT

A. Institutional Arrangements

181. According to the State Public Debt Law of Georgia, with the President's consent and in concurrence with the National Bank of Georgia, the Ministry of Finance is authorized to borrow and manage public debt on behalf of the Government of Georgia, to include: signing of loan agreements, issuance of short, medium, and long-term domestic government securities, and provide government guarantees to Georgian entities.

Ministry of Finance

182. The MOF's Public Debt and External Financing Department (PDEFD) is a dedicated debt department performing activities relating to external and domestic debt management. The PDEFD, under the authority of the Deputy Minister, has two main divisions each led by a Deputy Head of Department and a Division Head, namely: i) the Public Debt Division (PDD) and ii) the International Investment Projects Division. Current debt management activities carried out within Public Debt Division are as follows: Front/Middle Office - (i) participating in the preparation of the domestic government debt issuance calendar; (ii) the issuance of sovereign bonds in the international capital markets; (iii) negotiating donor financing: (iv) providing analytical inputs for planning the annual gross funding requirement; (v) conducts debt sustainability analysis (DSA); and (vi) domestic and external debt monitoring and forecasting. Back Office – (i) debt registration and accounting of external and domestic debt, on-lending, and guarantees; (ii) initiates debt servicing; (iii) analyzing multilateral loan terms and conditions; and (iv) monitors compliance requirements in on-lending and guarantee agreements.

183. In terms of fiscal coordination for the annual budget preparation and revisions, the PDEFD submits to the Budget Department with debt service projections and the expected aggregate stock of government debt.

184. Cash Management functions are within the Treasury Department under the Budget Department and the authority of the Deputy Minister. MoF has implemented a Single Treasury Account and cash flow forecasts are produced on a monthly basis for the full year.

Agreement with the National Bank of Georgia

185. The NBG's Financial Markets Department (FMD) acts as the MOF's fiscal agent to conduct primary market auctions of government securities. Auctions are conducted on a non-competitive and competitive multiple priced basis. The bids are sent, without names, to the MOF where a committee headed by the Deputy Minister formally approves the allocation.

186. As the fiscal agent the FMD closely coordinates with the MOF on the government's domestic borrowing program. The Payment Service Department handles the back office functions, which includes debt servicing as instructed by the MOF.

187. The National Bank of Georgia issues Certificates of Deposits (CDs) in maturities of 3-months and 6-months on a weekly basis for the purpose of liquidity management and closely coordinates with the MoF on system liquidity and debt issuance.

188. The NBG participates in the GoG's negotiation team for multi and bilateral debt, which includes the Ministries of Finance, Economy, Justice, Foreign Affairs and the relevant line ministry; all of these institutions must formally document their agreement with the terms obtained in the negotiation.

Consultation with Debt Management Advisory Committee (in development)

189. A Debt Management Advisory Committee is to be established which would comprise officials and staff of the MOF and NBG. The committee's outputs are as follows:
   a. Advise the Minister on –
      - Medium Term Debt Management Strategy;
      - Annual Financing Plan;
      - Guarantees and on-lending;
      - Restrictions on the amount of borrowing and guarantees; and
      - Assess the policies, strategies and operations of direct debt, on-lending, and guarantees for debt with a view to ensuring consistency with the Debt Law and the macroeconomic, monetary and fiscal policies of Government;
      - Monitor the implementation of the MTDS.

B. Domestic Government Securities

190. The MoF's policy objective is to develop a well-functioning domestic government securities market, promote price discovery through a benchmark government yield curve, and to encourage private sector access to domestic finance as a complementary alternative to traditional bank credit facilities.

191. The issuance of short, medium, and long-term local currency denominated government securities is another source for meeting the government's financing requirement. The promotion and development of efficient primary and secondary markets for government securities, over time, will provide the government with cost effective financing. The advancement of the Georgian economy and the increased levels of per capita gross national income will leave Georgia ineligible to receive new concessional financing terms from multi-lateral sources, in the medium-term, thus necessitating the increased use of domestic government securities as a funding source. To this extent, **it is intended to issue government securities minimum 30% of total borrowing for the medium-term.**

Financing Needs

192. The MoF's estimated aggregate domestic financing needs are based on the assumptions of the State Budget for 20XX. The projected new funding need of GELXXX and incorporating the expected refinancing of existed debt maturing within the current fiscal year 20XX estimates an aggregate issuance of domestic government securities of GELXXXX for 20XX.

Structure of Government Securities

193. The Ministry of Finance issues GEL denominated Treasury bills (T-bills) with maturities of 12-months and Treasury bonds (T-bonds) with tenors of 2, 5, and 10-years (Figure18). The issuance policy is to auction one-year T-bills and 2-year T-bonds monthly, 5-year T-bonds twice a quarter and 10-year T-bonds once a quarter. Auctions are conducted at the National Bank of Georgia on a competitive and non-competitive multiple priced basis. Eligible bidders in the primary market for government securities are only banks, however clients can bid through the banks.

Figure 18: Domestic Public Debt Composition

Source: MOF

194. In order to consolidate the total outstanding number of T-bill and T-bond benchmark series as well as to build up benchmark volumes for price discovery and secondary market liquidity, the MoF uses "reopenings" of previously issued securities. **The goal is to achieve a final size of each series of GEL XX to XXX and with a minimum size of GEL XX.**

195. The average time to maturity (ATM) of domestic government debt, as of December 2014, stood at 2.3 years. To accommodate the growing share of domestic government debt to total public debt and achieve a smooth redemption profile, **the ATM of domestic government debt is targeted to increase to 4 years in the medium-term.**

C. Market Communication

196. The Ministry of Finance and the Public Debt and External Finance Department seeks to further develop consultation dialogue with market participants through publications and meetings. The PDEFD publishes its annual estimated aggregate borrowing plan following the Parliament's approval of the annual State Budget.

197. The Ministry of Finance releases and provides information on the central government's public debt, to include:

- Medium-Term Debt Management Strategy (MTDS);
- Public Debt Statistics;
- Public Sector Debt Statistical Bulletin;
- Treasury Bill and Treasury Bond Auction Information;
- Quarterly Government Debt Newsletter (proposed).

Medium-Term Debt Management Strategy

198. The Public Debt and External Finance Department prepares the Medium-Term Debt Strategy, which is published and revised annually. The main topics of the MTDS are:

- Macroeconomic and Public Debt Overview;
- Goal and Objectives for the MTDS;
- Institutional Arrangements;
- Risk Management;
- Market Communication.

Auction Announcements

199. Approximately one week before the end of the year a borrowing plan for the following quarter, containing dates of auctions, security, maturity, and indicative volume is made public on the MoF and NBG websites. Five days before the auction date the volume of the

security to be sold is confirmed. The new borrowing plan for each quarter follows the same procedure.

200. The regulation document "on the Issue, Circulation, Registration and Redemption of Treasury Bills and Treasury Notes Issued by the Ministry of Finance of Georgia" provides information regarding terms and conditions, instruments, procedures, and access to the primary market. The regulation document is available on the National Bank of Georgia's website: www.nbg.gov.ge.

201. The National Bank of Georgia conducts the government securities auctions, releases to the public the overall auction result, and notifies the awarded bidders about the settlement details. Settlement is done T+1. The NBG automatically debits the bank accounts of the winners and credits the Government Treasury account and conducts the corresponding operation in the Central Securities Depository. The operations are conducted according to the Delivery-versus-Payment (DvP) principle.

Market Information

For consideration for PDEFD front and middle office to perform.

202. The Public Debt Department publishes a quarterly newsletter on the government's debt management activities and debt portfolio. This information is distributed to the public and market participants through the media and is published on the MoF's Government Debt Management website. The publication contains, among other information:

- Results of Treasury bill and bond auctions;
- Government debt outstanding
- Position of Treasury benchmark securities;
- Composition of the debt portfolio;
- Redemption profile of Government debt;
- Owners of Treasury securities.

APPENDIX 2: Summary of Recommendations & Actions

Table: 1 Summary of Recommendations

Summary of Recommendations	ST	MT	LT	Para
ST: 1-yr, MT: 1 to 3-yrs, LT: 3 to 5-yrs – Where all three term horizons are checked indicates an activity which is continuous and on going.				
1. MTDS Core Principles / Enabling Framework: • Legal Framework; • Institutional Arrangement; • Sound debt management systems.	**X**			**59 - 69**

2. MTDS Macroeconomic Coordination: • Fiscal Policy; • Debt Sustainability & Fiscal Planning; • Monetary Policy; • Exchange Rate Policy; • Domestic Debt Markets.	X	X		**70 - 75**
3. Recommended Debt and Risk Indicators: **Interest Rate Risk:** • Ratio of fixed to floating rate debt; • Average Time to Re-fixing of Debt (ATR); • Amount of or share of debt re-fixing in a given period. **Refinancing (roll-over) Risk:** • Average Time to Maturity (ATM); • Redemption profile of outstanding debt stock; • Ratio of debt falling due within 12-months. **Foreign Exchange Risk:** • Ratio of foreign currency debt to total debt; • FX currency liabilities to foreign currency reserves; • Ratio of external debt to exports. **Liquidity Risk:** • Ratio / proportion of short-term debt maturing within a period to the treasury balance (buffer); • Short-term external debt to international reserves.	X	X	X	**76 - 90**
4. Debt & Capital Market Development as an MTDS • MTDS objectives stating market development; • The government yield curve, its functions and development: • Market association development; • Institutional investor base behavior and development; • Non-resident investors; • Government securities as tools for conducting central bank monetary policy operations; • International capital markets.	X	X	X	**96- 111**
5. Actions/Steps in Developing & Designing a MTDS (Table 2)				**112 - 153**
6. Debt Strategy Analysis and Scenario Building • Currently and recommended, the PDEFD's front and middle office staffs are using the medium-term debt strategy analytical tool (MTDS TA). The purpose of the tool is to support quantitatively the process of decision-making. • Essentially, the test cases fall into two main groups (i) probable and (ii) plausible.	X	X		**154 - 161**

7. Debt Management and Analysis System **(Table 3)**				**174 - 180**
8. New Sections Suggested for MTDS Document **(Appendix 1)** • Institutional Arrangements; • Government Securities; • Market Communication.	**X**			**181 - 202**

Table: 2 Action Plan

Recommended Actions / Steps	ST	MT	LT	Para
Steps in Developing & Designing a MTDS				
ST: 1-yr, MT: 1 to 3-yrs, LT: 3 to 5-yrs – Where all three term horizons are checked indicates an activity which is continuous and on going.				
1. Identify the Objectives and Scope of the MTDS; • To clarify the objectives to achieve as well as to clarify the roles and responsibilities for debt managers accountability: ▪ Meet the funding requirement; ▪ Cost minimization: ▪ Prudent level of risk; ▪ Develop the government securities market. • Objectives are documented in the MTDS document. • Define MTDS scope: ▪ Direct central government debt; ▪ Contingent liabilities.	**X**			**112 - 113**
2. Identify the Current Debt Management Strategy and the Cost & Risk of Existing Debt; • Determine the starting point for analysis and to provide the baseline for determining desired changes in the debt composition e.g. FX vs. domestic debt: ▪ Identify the current strategy; ▪ Identify outstanding debt stock and composition; ▪ Calculate cost and risk indicators (sec V, para. 80).	**X**			**114 - 116**

3. Identify and Analyze Potential Funding Sources; • To determine the possible range of funding sources for the strategy and their availability and volume. Identify the constraints of each desired funding source: ▪ Identify potential funding sources characteristics e.g. cost, risk, and volume; ▪ Identify available instruments from external and domestic sources and the depth or volume for each instrument; ▪ Determine any constraints that may exist for each instrument and provide a ranking.	X	X	X	**117 - 119**
4. Identify Baseline Projections and Risks in Key Policy Areas; • Determine the baseline scenario for the analysis of alternative strategies and identify specific risks. Requires interaction with fiscal, monetary policy, and financial market authorities, and market participants: ▪ Start with most resent DSA projections as medium-term baseline; ▪ Identify baseline medium-term market rates; ▪ Identify and consider any external constraints. FX volatility and or financing international reserves; ▪ Assumptions of pricing of non-market based financing by creditor.	X			**120 - 123**
5. Review Key Longer-Term Structural Factors; • The reason is to have a longer-term view on factors that potentially could have an impact on the debt portfolio and requires coordination with the fiscal and monetary authorities: ▪ Exchange rate trends; ▪ Inflation trends e.g. central bank policy operations effects on domestic debt pricing; ▪ Concessional short-medium-long-term availability; ▪ Commodity prices volatility and vulnerability to the economy.	X	X	X	**124**
6. Assess and Rank Alternative Strategies on the basis of the Cost-Risk Trade-off; • Purpose is to analyse a number of alternative debt strategies, assess their performance, and identify a small number of candidate strategies, including a preferred strategy; ▪ Assess how cost could change under various scenarios; ▪ Assess how each strategy may mitigate risk to the portfolio; ▪ Assess if the strategies meet the MTDS objectives.	X	X		**125 - 128**

7. Review the Implications of Debt Management Strategies with Fiscal and Monetary Policy Authorities; • Determine if the strategies are consistent with fiscal and monetary policies, debt sustainability, and market development: ▪ Provide candidate strategies with the fiscal and monetary authorities; ▪ Discuss with the financial markets authorities e.g. central bank, the strategies potential impact of the debt and capital markets.	**X**	**X**		**129 - 131**
8. Submit and Secure Agreement on the MTDS; • Propose the strategy to the highest decision maker for approval: ▪ Provide the preferred strategy as well as the alternative ones considered; ▪ Outline the rationale for selecting the preferred strategy and describe the costs and risks; ▪ Upon agreement of the MTDS, it should be disseminated.	**X**	**X**	**X**	**132**
9. Dissemination of MTDS; • The Ministry of finance provides a press release or *impact announcement* to notify creditors, investors, credit rating agencies, and key stakeholders so to facilitate open dialogue as to the strategy's rationale and direction.	**X**	**X**	**X**	**133 - 135**
10. Implementation and Monitoring of MTDS; • Upon agreement of the MTDS, the PDEFD should develop an internal annual financing plan outlining how the strategy will be implemented over the fiscal year; • Requires inter-agency coordination and reporting requirements between the Treasury Department, conducting cash flow forecasting, and the PDEFD; • The MTDS will need to be reviewed annually to confirm its relevance given the potential for changes in macroeconomic and market conditions; • Implementation could require strategic activities to start moving towards and or adjustments to achieve the desired portfolio composition; • Progress reports on the implementation on the MTDS should be produced by the PDEFD's front and middle office; • If there are fundamental shifts in macroeconomic or market conditions, the MTDS should be reassessed.	**X**	**X**	**X**	**136 - 148**

Table 3: Debt Management and Analysis System

Debt Management and Analysis System	ST	MT	LT	Para
ST: 1-yr, MT: 1 to 3-yrs, LT: 3 to 5-yrs - Where all three term horizons are checked indicates an activity which is continuous and on going.				
1. Analytical Capacity: • The MOF has two debt data systems, Fiscal Forecasting Department's internally developed debt management system (eDEM) for domestic debt and the PDEFD's Debt Management and Financial Analysis System (DMFAS) for external debt. These are the current analytical activities: ▪ Debt Sustainability Analysis is conducted annually jointly by the FFD and the PDEFD staffs using the IMF's DSA template; ▪ Medium-Term Debt Management Strategy planning and scenario building is recently being conducted by PDEFD's using the World Bank's MTDS Analytical Tool (MTDS AT). ▪ Macroeconomic forecasts and outcomes are regularly produced by the Fiscal Forecasting Department (FFD) and should be provided to the relevant staffs conducting the above two activities.	**X**	**X**		

2. Analytical Coordination: • Given the above stated activities it would be useful for PDEFD to coordinate with FPD in respect to the MTDS AT. FPD could analyze the MTDS TA's methodology and build similar calculations and functions into the MoF's internally developed debt management system. • The MTDS AT a spreadsheet-based structure developed on the basis of scenario-analysis models typically used by debt management offices for: (i) projecting cash flows as a function of existing debt; (ii) macroeconomic assumptions, e.g., primary balances & GDP; (iii) new borrowing strategies; and (iv) financial variables, including interest rates and exchange rates.	**X**	**X**	**X**	
3. Data & Analytical Consolidation: • Integration and migration of FX debt into the eDEM system would be a considerable undertaking and requiring internal managerial will and appropriate resources e.g. additional staff. However, marketable FX debt could be added into the eDEM analytical database.		**X**	**X**	
4. Build into the debt system, as supplemental to existing data, for analysis and reporting the following risk indicators (for explanations refer to paragraphs indicated): **A. Interest Rate Risk Indicators-** • Ratio of fixed to floating rate debt; • Average time to re-fixing of debt; • Amount of or share of debt re-fixing in a given period; • Average interest rate.	**X**	**X**		**86**
B. Refinancing (roll-over) Risk Indicators- • Average time to maturity; • Redemption profile of outstanding debt stock; • Ratio of debt falling due within a period e.g. 1-year.	**X**	**X**		**87**

C. Time to Re-fixing- **Average Time to Maturity =** $\frac{\Sigma[(\text{Value of bond})*(\text{Days to Maturity})]}{\Sigma(\text{Value of bonds})}$ **Average Time to Resetting (for floating rate bond) =** $\frac{\Sigma[(\text{Value of bond})*(\text{Days to Resetting})]}{\Sigma(\text{Value of bonds})}$ **Average Time to Re-fixing =** Weighted average of Time to Maturity for Fixed rate bonds and average time to resetting for floating rate bonds.	**X**	**X**		
D. Foreign Exchange Risk- • Ratio of foreign currency debt to total debt; • FX currency liabilities to foreign currency reserves; • Ratio of external debt to exports.	**X**	**X**		**88**
E. Liquidity Risk- • Short-term external debt to international reserves.	**X**	**X**		**89**
5. Domestic Government Securities Auctions Database; **Auction Database would contain information on**: • All offerings by the sovereign on each auction date; • All bids; • All bidders to the extent available; on all awards; • All settled transactions and 'fails' to settle; and • Market conditions. **Enter, maintain, track, and create historical graphics on government securities auction details to include:** • Bid-to-cover ratios; • Accepted ranges of bids: and • Weighted average interest rate result.	**X**	**X**	**X**	**179**

6. Government Securities Yield Curve- • The National Bank of Georgia is planning to develop domestic government securities yield curve: ▪ It would be useful to integrate, over time, the yield curve data and structure into the PDEFD's and FPD's analytical tools; ▪ Conduct interest rate scenario simulations for the slope of the yield curve either increasing (steepening) or decreasing (flattening) and comparison for each security's maturity and the expected cost along the curve e.g. short-term to long-term.		**X**	**X**	**179**

APPENDIX 3: STAKEHOLDER CONSULTATIONS & DOCUMENTS RECEIVED

Table: 4 List of Stakeholder Consultations

Date	Institution	Officials Present
10.2.15	Ministry of Finance	• Mr.Giorgi Kakauridze, Deputy Minister
11.2.15	Ministry of Finance	• Mr. Nikoloz Gagua, Head of Fiscal Forecasting Department; • Giorgi Mamatelashvill, Fiscal Forecasting Department and Financ
13.2.15	Ministry of Finance	• David Lezhava, Deputy Minister; • Ioseb (Soso) Skhirtladze, Head of Public Debt and External Finan • Irakli Katcharava, Senior Specialist
14.2.15	ADB	• Robert Singletary, Capital Market Specialist
17.2.15	World Bank	• Ana Fiorella Carvajai, Lead Securities Market Specialist; • Ketut Ariadi Kusuma, Senior Securities Market Specialist
20.2.15	Ministry of Finance	• Giorgi Mamatelashvill, Fiscal Forecasting Department and Financ
20.2.15	Ministry of Finance-PDEFD	• Irakli Katcharava, Senior Specialist; • Demetre Kupradze, Senior Specialist; • Irakli Eliosidze, PDEFD Advisor.
25.2.15	National Bank of Georgia	• Archil Mestvirishvili, Deputy Governor;

		• Giorgi Laliashvili, Head of Financial Markets Department; • Mamuka Machaidze, Head of Monetary Operations Division; • Manana Tsitsishvili, Head of Non-Banking Institutions Supervisio
15.4.15	National Bank of Georgia	• Giorgi Laliashvili, Head of Financial Markets Department;
15.4.15	ADB	• Robert Singletary, Capital Market Specialist
16.4.15	Ministry of Finance-PDEFD	• Ioseb (Soso) Skhirtladze, Head of Public Debt and External Finar • Irakli Katcharava, Senior Specialist; • Demetre Kupradze, Senior Specialist
16.4.15	Ministry of Finance-FPD	• Giorgi Mamatelashvill, Fiscal Forecasting Department and Financ
17.4.15	Georgian Stock Exchange	• George Paresishvili, CEO

Table: 5 List of Documents Received

Institution	Documents Received
ADB	• Policy and Advisory Technical Assistance (PATA) – Sept 2014; • RRP – Oct 2014.
MOF-PDEFD	• DeMPA World Bank Debt Management Performance Assessment - 2013; • Georgia Treasury Securities Outlook – Nov 2014 • Georgia Outlook- Nov 2014; • Medium Term Debt Management Strategy – 2015 – 2017; • Develop the Middle Office Function; • Issues on Medium Term Debt Management Strategy – Internal Document 20115 -2017; • Treasury Debt Issuance Regulation; • IMF DSA 2013; • Draft Review of Georgian Debt Law 2011.
MOF	• Citizens Guide to the Budget; • State Budget Presentation.
NBG	• Macroeconomic Overview Presentation; • Monetary Policy Instruments; • Strategy to Develop Treasury Securities Market; • Invest in Treasuries Proposal.

APPENDIX 4: CONTRACT TERMS OF REFERENCE

Contract	117023-S84351
Project	TA-8716 GEO: Strengthening Domestic Resource Mobilization - International Debt Management Specialist (48044-003)
Expertise	Debt Management
Source	International

Objective and Purpose of the Assignment:

To strengthen public debt management.

Scope of Work:

To review legal and regulatory framework and build analytical capacities.

Detailed Tasks:
The main tasks to be undertaken by the specialist are to-

(i) Review the legal framework to identify gaps in fiscal debt management practices;
(ii) Develop a medium-term debt management strategy looking into institutional arrangements, debt monitoring and forecasting practices, cash management practices, how to improve analytical capacity in external and domestic borrowing, carry out a preliminary fiscal transparency evaluation and improve communication with domestic stakeholders;
(iii) Make recommendations covering the above areas;
(iv) Develop a medium-term capacity building and action plan to implement recommendations;
(v) Develop a blueprint to improve and upgrade debt management and financial analysis system and allied capacity building requirements; and
(vi) Conduct at least two workshops to build a broad consensus on the policy and capacity building areas in debt management.